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Notes on the Scythrididae fauna of the Volgo-Ural region and southern Buryatia, with one new synonym and descriptions of six new species (Lepidoptera: Scythrididae)

K. Nupponen

Abstract

A list of 13 species of Scythrididae recorded during 25-V / 08-VI-2006 in southern Buryatia and 16-VIII / 03-IX-2006 in the Volgo-Ural region is presented, as well as results of re-examination of two taxa collected in 2002 from Buryatia and a few old records from the southern Ural Mountains. Six new species are described: *Scythris albosuffusella* Nupponen, sp. n., *S. apotomella* Nupponen, sp. n., *S. buraetica* Nupponen, sp. n., *S. eevae* Nupponen, sp. n., *S. heikkii* Nupponen, sp. n. and *S. nigridorsella* Nupponen, sp. n. *Scythris karinupponeni* Bengtsson, 2000 is synonymized with *S. barguzinensis* Bengtsson & Liška, 1996, syn. n. The previously unknown female of *Scythris jakutica* Sinev, 2001 is described. *S. bagdadiella* Amsel, 1949 and *S. fissurella* Bengtsson, 1996 are reported as new to Europe and *S. anomaloptera* (Staudinger, 1880) as new to Russia. The known distribution range of each species is given.
KEY WORDS: Lepidoptera, Scythrididae, new species, new synonymy, first records, southern Buryatia, Volgo-Ural region.

Notas sobre los Scythrididae de la fauna de la región Volgo-Uralense y del sur de Buryatia, con una nueva sinonimia y descripción de seis nuevas especies (Lepidoptera: Scythrididae)

Resumen

Se presenta una lista de 13 especies de Scythrididae capturados durante el 25-V / 08-VI-2006 en el sur de Buryatia y 16-VIII / 3-IX-2006 en la región Volgo-Uralense, así como el resultado de reexaminar dos taxa capturadas en 2002 de Buryatia y unas pocas capturas antiguas del sur de las Montañas Urales. Se describen seis nuevas especies: *Scythris albosuffusella* Nupponen, sp. n., *S. apotomella* Nupponen, sp. n., *S. buraetica* Nupponen, sp. n., *S. eevae* Nupponen, sp. n., *S. heikkii* Nupponen, sp. n. y *S. nigridorsella* Nupponen, sp. n. *Scythris karinupponeni* Bengtsson, 2000 se sinonimiza con *S. barguzinensis* Bengtsson & Liška, 1996, syn. n. Se describe la hembra desconocida de *Scythris jakutica* Sinev, 2001. Se cita como nueva para Europa *S. bagdadiella* Amsel, 1949 y *S. fissurella* Bengtsson, 1996 y se cita como nueva para Rusia *S. anomaloptera* (Staudinger, 1880). Se da la distribución conocida de cada una de las especies.
PALABRAS CLAVE: Lepidoptera, Scythrididae, nuevas especies, nueva sinonimia, primera cita, sur de Buryatia, región Volgo-Uralense

Introduction

The Scythrididae fauna of the Palaearctic region has been studied quite intensively during the last fifteen years, and numerous new species have been described. Recently BENGTSSON (2005) summarized the published papers on the subject. Subsequently four further articles on Palaearctic Scythrididae

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have been published, with descriptions of fifteen new species (NUPPONEN, 2005a, 2005b; NUPPONEN *et al*., 2005; PASSERIN d'ENTRÈVES & ROGGERO, 2006).

The present article is based on new materials of Scythrididae collected by the author during the summer 2006 from southern Buryatia and the Volgo-Ural region. Results of re-examination of some southern Siberian species is included, as well.

Material and methods

The expedition to southern Buryatia was made during 25-V / 08-VI-2006. The investigated area is situated in the valleys of the River Selenga and its affluent Chikoy. Altogether 8 species embracing 358 specimens of scythridids were recorded during the trip, despite a late spring and dominantly rainy and windy weather. All specimens were collected by sweeping and netting during daytime. The expedition to the Volgo-Ural region (Orenburg and Astrahan oblasts) was made during 16-VIII / 03-IX-2006. Second half of August was extremely hot there, and the daytime temperature rised up to + 39º C. Nights were also warm, and huge numbers of moths came to artificial light, among them a few interesting scythridids. For further notes on the collecting sites, see NUPPONEN *et al*. (2000) and NUPPONEN (2003).

During the present work, two taxa reported from southern Buryatia (NUPPONEN, 2003) were re-examined, viz. *Scythris nitidella* Bengtsson & Liška, 1996 and *S. penicillata* Chrétien, 1900. The Buryatian taxa appeared to belong to the other closely related, still undescribed species. The two species are described in this paper, as well as three further species from southern Buryatia and one from the Lower Volga region. Variation of *Scythris karinupponeni* Bengtsson, 2000 was studied on the basis of large materials originated from the Ural Mountains and southern Siberia (Altai, Buryatia). As a result, *S. karinupponeni* is synonymised with *S. barguzinensis* Bengtsson & Liška, 1996, syn. n.

List of Scythrididae species

Scythris albosuffusella Nupponen, sp. n.

Type material. Holotype: ♂ (Fig. 1): Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 04-VI-2006, K. Nupponen leg. In coll. T. & K. Nupponen.

Paratypes 3 ♂♂, 1 ♀: Ibidem, 19-VI-2002, 1 ♂, 1 ♀, 04-VI-2006, 2 ♂ ♂, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 1/24-X-2006 ♂, 2/08-X-2006 ♀, 1/08-X-2002 ♀. One further preparation of the male genitalia preserved in glycerol. In coll. T. & K. Nupponen.

Diagnosis: Externally *S. albosuffusella* Nupponen, sp. n. may be confused with few scythridids occurring in the same region, for example *S. jakutica* Sinev, 2001, *S. lativalvella* Sinev, 2001 and some forms of *S. felixi* Bengtsson & Sutter, 1996. In fresh specimens, a broad streak in fold, scattered white scales over the forewing and a white collar are good characteristics for *S. albosuffusella*. The white scales are easily chafed away, and worn specimens can safely be determined only by examining the genitalia. The male genitalia are close to those of *S. nitidella* Bengtsson & Liška, 1996, but differ by broader valvae of equal width, a very wide gnathos base with short and robust shanks, diverging shanks of the uncus with a distinct ridge at inner margin and laterally fused lobes near base of the uncus (in *S. nitidella* (from Tuva) the lobes are joined to the uncus forming a cup-shaped structure). In the female genitalia, shape of the sterigma is diagnostic.

Description: Wingspan 10.5-12 mm. Head, antenna, neck tuft, collar, tegula, thorax and haustellum dark brown with faint purplish hue; neck tuft, collar and haustellum mixed with white. Labial palp: segment I white; segments II and III dark brown, basal part of segment II and upper surface with scattered white scales. Legs dark brown mixed with whitish (femur) and dirty beige (tibia and tarsus). Abdomen dark fuscous, ventrally more (female) or less (male) mixed with dirty white. Forewing dark brown with faint purplish hue; in fold rather broad and indistinct white streak from base to cell end;

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scattered white scales frequently in apical and subapical area and more or less sparsely at basal half; black scales in subcostal and subdorsal area and around fold; two indistinct black dashes above fold at 2/3 and at cell end, and two similar dashes below fold at 0.5 and at tornus. Hindwing dark fuscous.

Male genitalia (Figs. 2-3, 5): Uncus U-shaped, shanks slightly diverging. Near base of uncus a pair of lobes, attached to callous ridge reaching subapical area of uncus at inner margins of shanks; lobes laterally fused at middle of uncus. Gnathos base widely U-shaped, shanks robust and furrowed with pointed tip; distal arm tapered and distally bent, tip pointed. Aedeagus as long as valva, slightly bent, distal half tapered. Valva bent, short and broad, of equal width, subapically sparsely setose, tip rounded. Sternum VIII subtriangular, anterior margin concave; posteriorly extended with deep, V-shaped medioposterior incision. Tergum VIII subrectangular, posterior margin convex.

Female genitalia (Fig. 4): Sterigma basically U-shaped, anterior corners extended; shanks apically with extension having ragged edge. Sternum VII quadrangular; posterior margin medially incised and with narrow membranous extension. Apophyses anteriores 0.5 x length of apophyses posteriores.

Bionomy: The habitat of the new taxon is a rocky steppe slope.

Distribution: Southern Buryatia. Only known from the type locality.

Etymology: Lat. *albus* = white; *suffusus* = overspread. From white scales spread over the forewing.

Remarks: *S. albosuffusella* Nupponen, sp. n. belongs to the *pascuella* species-group. A single male reported from southern Buryatia as *S. nitidella* (NUPPONEN, 2003) belongs to the taxa newly described here, as well as the female reported as *Scythris* sp. 1 in the same article. The male genitalia of a closely related *S. nitidella* were illustrated by BENGTSSON & LIŠKA (1996) and the female genitalia by BENGTSSON (1997b). The uncus-gnathos complex in the male genitalia of *S. nitidella* (from Tuva) is illustrated here for comparison (Fig. 6). There appears to be some variation in the male genitalia of *S. nitidella*, and it is possible that there are more than one species mixed in this taxon.

Scythris anomaloptera (Staudinger, 1880)

Russia, Volgograd oblast, 49º 25-40' N 44º 10-25' E, 100-200 m a.s.l., Olhovka village 20 km SW, 15-V-2005, 11 ♂♂, 2 ♀♀, K. Nupponen leg. One genitalia preparation preserved in glycerol.

Distribution: France, Russia (Lower Volga region), Spain, Turkey, (?) Bosnia-Herzegovina.

Remarks: New to Russia.

Scythris apotomella Nupponen, sp. n.

Type material. Holotype: ♂ (Fig. 7): Russia, S-Buryatia, 50º 58-59' N 106º 38-40' E, 550-600 m a.s.l., Chikoy valley, Novoselenginsk village 10 km S, sand dunes/sandy steppe, 03-VI-2006, K. Nupponen leg. Genitalia slide: K. Nupponen prep. no. 6/08-X-2006. In coll. T. & K. Nupponen.

Paratype (1 ♀): Idem. Genitalia slide: K. Nupponen prep. no. 1/08-X-2006. In coll. T. & K. Nupponen.

Diagnosis: Externally *S. apotomella* Nupponen, sp. n. resembles several dark scythridids of equal size, for example *S. eversmanni* Nupponen & Nupponen, 2000, *S. ninae* Nupponen, 2003 and *S. albosuffusella* Nupponen, sp. n. (see above), but differs from those by narrow forewings with an irregular white streak in fold and two black dashes. The genitalia of both sexes indicate a close relationship to *S. luxatiella* Nupponen & Kaitila, 2000. In the male genitalia of *S. apotomella*, the right valva is much broader than that of *S. luxatiella* and both valvae are distally cut off. In the female genitalia of *S. apotomella*, the sterigma is less robust and its sclerotized part is shorter, medioposterior plate of sternum VII is wider and apophyses anteriores are longer.

Description: Wingspan 10-10.5 mm. Head, antenna and thorax dark brown. Collar mixed with dirty white, pale brown and dark brown; dirty white scales dominating in fresh specimen(s). Tegula dark brown, terminally paler. Neck tuft pale brownish. Haustellum medially dark brown, laterally dirty white. Labial palp dark brown, segment I and upper surface more or less mixed with pale brown and dirty white. Legs: femur pale brown, tibia and tarsus dark brown mixed with paler scales; hindleg tibia

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with long hairscales. Abdomen fuscous; ventral side paler and in female mixed with dirty white. Forewing narrow, dark brown; white scales in fold forming rather broad and irregular streak from base to 0.9, cut by black dashes at 0.5 and at cell end; scattered white scales sparsely at basal area but rather frequently at apical third. Hindwing pale fuscous.

Male genitalia (Fig. 8): Asymmetrical. Uncus scoop-shaped. Gnathos situated left, stout, bent, terminally rounded with lateral extension. Tegumen hood-shaped with small sclerotized lateral extension. Left valva medioventrally somewhat widened; distally cut off, near tip few setae; at base moderately large distinct flap; mediodorsally strongly sclerotized, rounded, incised formation; between base and sclerotization flat flap. Right valva about of equal width, tip cut off and with a few strong setae; at base distinct flap near ventral margin and weakly sclerotized ridge from base of dorsal margin to tip of valva; dorsal margin strongly sclerotized from 0.1 to 0.9, and with shallow extension at 0.25. Aedeagus 0.75 x length of right valva, subbasally curved; basal 0.3 rather thick, medial 0.3 tapered, distally slender and straight. Sternum VIII subrectangular, membranous. Tergum VIII subtriangular, posteriorly elongated and slightly asymmetrical.

Female genitalia (Fig. 9): Sterigma asymmetrical, situated at right, thick, horn-shaped formation; distal 0.3 strongly sclerotized, tapered and bent. Sternum VII rectangular, mid-posteriorly with subquadrangular, slightly asymmetrical plate; plate with rounded, uneven posterior margin and pointed anterior corners. Apophyses posteriores long and slender. Apophyses anteriores 0.2 x length of apophyses posteriores.

Bionomy: The specimens were collected by sweeping on a gravely steppe slope.

Distribution: S Buryatia. Only known from the type locality.

Etymology: Lat. *apotomos* = cut off. From the distally cut off valvae in the male genitalia.

Remarks: *S. apotomella* Nupponen, sp. n. belongs to the *pulicella* species-group. Its closest known relative is the Uralian *S. luxatiella*, based on the structure of both male and female genitalia (see NUPPONEN *et al*., 2000).

Scythris bagdadiella Amsel, 1949

Russia, southern Urals, 50º 40-45’ N 54º 26-28’ E, 210 m a.s.l., Orenburg oblast, Pokrovka village 20 km S, Schibendy valley, 22-VIII-2006, 1 ♂, K. Nupponen leg. Genitalia slide: K. Nupponen prep. no. 1/24-IX-2006. (Figs. 10-12).

Distribution: Algeria, Iraq, Russia (S Ural), Turkey.

Remarks: There is a little variation in the median flap of sternum VIII in the male genitalia. That of the Uralian specimen is broad, resembling a mushroom. The specimen came to artificial light at night. The habitat is a chalk steppe. New to Europe and Russia.

Scythris barguzinensis Bengtsson & Liška, 1996

Scythris karinupponeni Bengtsson, 2000, **syn. n.**

Material studied. *Scythris karinupponeni* Bengtsson, 2000 (92 ♂ ♂, 11 ♀ ♀).

Type material: Holotype ♂*:* Russia, Southern Urals, 53º 57’ N 59º 03’ E, 650 m a.s.l., Cheliabinsk oblast, near Moskovo village, 12-VII-1998, K. Nupponen leg.; genitalia slide: BÅB 765X. In coll. T. & K. Nupponen.

Paratypes 29 ♂ ♂, 5 ♀ ♀: Same locality as holotype: 12-VII-1998, 3 ♂ ♂, K. Nupponen leg.; 09-VII-1997, 4 ♂ ♂, 10-VII-1997, 4 ♂ ♂, K. Nupponen & J. Junnilainen leg.; 10-VII-1997, 11 ♂ ♂, 2 ♀ ♀, J. P. Kaitila leg.; Russia, Southern Urals, 52º 39’ N 59º 34’ E, 350 m a.s.l., Cheliabinsk oblast, Arkaim reserve near Amurskii village, 22-VII-1998, 2 ♂ ♂, 23-VII-1998, 3 ♂ ♂, K. Nupponen leg.; 08-VII-1997, 1 ♀, J. P. Kaitila leg.; Russia, Southern Urals, 53º 02’ N 62º 06’ E, 200 m a.s.l., Cheliabinsk oblast, Ajat river near Nikolaevka village, 04-VII-1997, 1 ♀, J. P. Kaitila leg.; Russia, Southern Urals, 53º 59’ N 61º 12’ E, 250 m a.s.l., Cheliabinsk oblast, Troizkii reserve near Berlin village, 30-VI—02-VII-1997, 1 ♂, 1 ♀, J. P. Kaitila leg.; Russia, Magadan oblast, 62º 50’ N 148º 15’ E, 750 m a.s.l., near Susuman, steppe slope/Larix, 15-VII-1997, 1 ♂, J. Jalava & T. Tammaru leg. Genitalia slides: BÅB 4221, BÅB 4222, BÅB 723X. In colls. T. & K. Nupponen, J. Junnilainen, J. P. Kaitila B. Å. Bengtsson and Finnish Museum of Natural History, University of Helsinki.

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Other material: Russia, Southern Urals, 53º 57' N 59º 03' E, 650 m a.s.l., Cheliabinsk oblast, near Moskovo village, 18—19-VI-1998, 1 ♂, J. Junnilainen leg. & coll.; Russia, Southern Urals, 51º 09-12' N 58º 02-08' E, 320 m a.s.l., Orenburg oblast, Orsk 40 km W, near Guberlja village, 26-VI-2003, 1 ♂, K. Nupponen leg.; Russia, Altai Mountains, 50º 14-16' N 87º 40' E, 1500 m a.s.l., Chuja valley, Aktash village 5 km SE, 05-VII-2000, 46 ♂♂, 5 ♀♀, 06-VII-2000, 1 ♂, T. & K. Nupponen leg.; Russia, Altai Mountains, 50º 18-20' N 87º 30-40' E, 1400-1500 m a.s.l., Chuja valley near Aktash village, 06-VII-2000, 5 ♂♂, 3 ♀♀, T. & K. Nupponen leg.; Russia, Altai Mountains, 50º 25' N 86º 35-40' E, 800 m a.s.l., Katun valley near Inja village, 07-VII-2000, 8 ♂♂, T. & K. Nupponen leg.; Russia, Altai Mountains, 50º 48' N 86º 00' E, 1000 m a.s.l., near Shashikman village, 08-VII-2000, 2 ♂♂, T. & K. Nupponen leg.; Russia, S-Buryatia, 51º 37' N 106º 46' E, 600 m a.s.l., Hamar Daban Mountains, bolshoi Sanzheevka river, Kharamsha village 2 km W, forest steppe, 27-VI-2002, 4♂♂, 1 ♀, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 8/25-IV-1998, 1/29-X-2006, 2/29-X-2006; BÅB 4221, BÅB 4222, BÅB 723X. Eight further genitalia preparations preserved in glycerol. In coll. T. & K. Nupponen.

Scythris barguzinensis Bengtsson & Liška, 1996 (1 ♀).

Type material: Holotype ♀: photographs of the moth and female genitalia in the original description, specimen labelled "USSR, Baikal, Sv. Nos, 40 km NW Ust-Barguzin, 29-VII / 2-VIII-1989, J. Liška leg.". Genitalia slide BÅB 430X. In coll. National Museum, Prague.

Distribution: Russia: from S Ural (Orenburg and Cheliabinsk oblasts) through Siberia (Altai, Transbaikalia) to Magadan district and Primoriye.

Remarks: *Scythris barguzinensis* was described from northern Buryatia on the basis of a single, very worn female. The taxon is overlooked in the recent publications (e. g. SINEV, 2001b), and to date no further specimens have been reported. Four years later, *S. karinupponeni* was described from the southern Urals on the basis of a series of specimens including both sexes. Since that the taxon appeared to be widely distributed in southern Siberia and Russian Far East, from the Ural Mountains to Magadan district and Primoriye. Recently collected materials from different regions, including males and females from the same localities, allow to study variation of *S. karinupponeni*.

In adult moths, a white streak in fold of the forewing is somewhat variable. In some specimens the streak is rather distinct, but in extreme cases it is reduced to an indistinct subbasal suffusion. The pale streaks are easily chafed away, and worn specimens give an impression of a dark, slightly glossy moth with scarce pale scales in fold. The moths originated from the Altai Mountains appear to be in the average less contrastic than those from The Urals and Buryatia, and the Uralian specimens are smaller in size than southern Siberian ones. In the female genitalia, posterior part of the sterigma is sometimes less elongate. However, if the genitalia are not strongly flattened during mounting on a slide, the sterigma usually lies in such position that it looks shorter from vertical view (NUPPONEN (2003): Fig. 25; see also NUPPONEN *et al.*, 2000). In the male genitalia, posterior projection of the valva is in the average longer and tergal segment VIII more elongated in southern Siberian specimens (Figs. 13-14; see also NUPPONEN *et al.*, 2000). However, there is a similar variation also inside populations, and the differences are insufficient to be diagnostic. In the female genitalia, shape of the sterigma of *S. barguzinensis* is within the range of that of *S. karinupponeni*. As the external appearance and distribution of *S. barguzinensis* also fit well in with those of *S. karinupponeni*, evidently the two taxa are conspecific. Thus, *S. karinupponeni* is a junior synonym of *S. barguzinensis*, syn. n.

Scythris buraetica Nupponen, sp. n.

Type material. Holotype: ♂ (Fig. 15): Russia, S-Buryatia, 51º 37' N 106º 46' E, 600 m a.s.l., Hamar Daban Mountains, bolshoi Sanzheevka river, Kharamsha village 2 km W, forest steppe, 28-VI-2002, K. Nupponen leg. In coll. T. & K. Nupponen.

Paratypes 32 ♂ ♂, 30 ♀♀: Ibidem, 27-VI-2002, 9 ♂ ♂, 6 ♀ ♀, 28-VI-2002, 24 ♂ ♂, 24 ♀ ♀, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 1/04-X-2002, ♂, 7/04-X-2002, ♀. Two further genitalia preparations preserved in glycerol. In coll. T. & K. Nupponen.

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Diagnosis: *S. buraetica* Nupponen, sp. n. forms a species complex together with the western European *S. penicillata* Chrétien, 1900 and the Altaian *S. spinella* Nupponen & Nupponen, 2001. Externally the three taxa are alike, *S. buraetica* being in the average palest and largest in size. In the male genitalia of *S. buraetica*, the shallowly club-shaped right valva and a thick basal extension of the gnathos with apical teeth are diagnostic. *S. spinella* is readily separated from the two other species by a thorn-like extension at tip of the right valva. In *S. penicillata*, the right valva is of equal width and subapically tapered with cut off tip, and basal extension of the gnathos and lateral extension at left side of tegumen are narrower and more elongated than those of *S. buraetica* and *S. spinella*. *S. penicillata* differs from *S. buraetica* also by a less swollen medial part and a shorter and broader terminal extension of the gnathos, and larger tegumen. The female genitalia of *S. buraetica* differ from those of *S. spinella* and *S. penicillata* by a longer and posteriorly rounded ventral segment VIII.

Description: Wingspan 8.5-11 mm. Head, antenna, collar, tegula, neck tuft, thorax and haustellum dark olive brown mixed with pale yellowish brown. Antenna 0.75 x length of forewing. Labial palp: segment I yellowish white; segments II and III dark brown, segment II basally mixed with pale yellowish brown. Legs: femur dirty whitish fuscous, tibia and tarsus dark yellowish brown with faint purplish hue. Abdomen dorsally dark olive fuscous, ventrally fuscous mixed with paler scales. Forewing narrow, dark olive brown; in fold pale yellowish brown streak from base to midwing; scattered scales of same colour exist sparsely at basal area and frequently at apical half; costal margin slightly convex. Hindwing dark fuscous.

Male genitalia (Fig. 16): Uncus reduced. Gnathos complex, strongly sclerotized; basal extension thick, bent and pointed, apically with a few teeth; medial part semicircularly swollen; terminal extension short with blunt tip. Tegumen hood-shaped; at left side large lateral extension; further narrow, sclerotized lateral extension at both sides. Aedeagus 1/3 x length of right valva, tapered, at 2/3 bent 50º. Left valva reduced to small protrusion. Right valva long and slender, shallowly club-shaped and sigmoid, basal 1/3 narrowest, tip rounded. Abdominal segment VIII twisted: sternal and tergal segments lie almost on lateral sides of the genitalia. Sternum VIII and tergum VIII slightly asymmetrical, membranous plates.

Female genitalia (Fig. 17): Sterigma asymmetrical, situated at right, tapered, strongly sclerotized from 0.35 to 0.9; basal part straight; at 0.4 curved 70º; distal 0.6 bent, horn-shaped. Ventral segment VIII subrectangular, slightly asymmetrical; anterior corners elongated; posteriorly rounded, margin uneven. Apophyses posteriores long and slender. Apophyses anteriores short, straight.

Bionomy: The habitat is a steppe. All specimens were collected by sweeping on *Cerastium arvense* L., evidently the host plant of *S. buraetica*.

Distribution: Russia (S Buryatia). Only known from the type locality.

Etymology: The name of the species refers to its geographical origin.

Remarks: The present material of *S. buraetica* Nupponen, sp. n. was earlier reported as *S. penicillata* (NUPPONEN, 2003). Here the Buryatian taxon is raised to species rank on the grounds of differences in the genitalia (see Diagnosis). These characteristics are constant and do not overlap between the two taxa. Actually, the male genitalia of *S. buraetica* resemble those of *S. spinella* rather than *S. penicillata* in many details, like shape of the valva, the gnathos and a lateral extension at left side of tegumen. In the female genitalia, shape of ventral segment VIII is almost equal to each other in *S. penicillata* and *S. spinella*, but rather far from both in *S. buraetica*. The genitalia of *S. spinella* were illustrated by K. & T. NUPPONEN (2001), and those of *S. penicillata* by BENGTSSON (1997a) and NUPPONEN (2003). For further notes on *S. penicillata* and the habitat of *S. buraetica*, see the recent paper on Buryatian Scythrididae (NUPPONEN, 2003).

Scythris cassiterella (Snellen, 1884)

Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 04-VI-2006, 5 ♂♂, 2 ♀♀, 06-VI-2006, 1 ♂, 1 ♀, K. Nupponen leg.

Distribution: S & E Siberia, NW Mongolia, Korea, C Asia.

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***Scythris eevae* Nupponen, sp. n.**

Type material. Holotype: ♂ (Fig. 21): Russia, S-Buryatia, 50º 58-59' N 106º 38-40' E, 550-600 m a.s.l., Chikoy valley, Novoselenginsk village 10 km S, sand dunes/sandy steppe, 02.VI.2006, K. Nupponen leg. In coll. T. & K. Nupponen.

Paratypes 60 ♂ ♂, 57 ♀ ♀: Ibidem, 28-V-2006, 2 ♂ ♂, 1 ♀, 29-V-2006, 18 ♂ ♂, 16 ♀ ♀, 02-VI-2006, 11 ♂ ♂, 11 ♀ ♀, 03-VI-2006, 29 ♂ ♂, 27 ♀ ♀, K. Nupponen leg.; Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 27-V-2006, 1 ♂, 2 ♀♀, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 7/08-X-2006, ♂, 1/07-X-2006, ♀. Three further genitalia preparations preserved in glycerol. In coll. T. & K. Nupponen.

Diagnosis: Externally *S. eevae* Nupponen, sp. n. can be confused with many small, dark scythridids, for example *S. gorbunovi* Nupponen, 2003, *S. hamatella* Nupponen & Nupponen, 2001 and *S. sinevi* Nupponen, 2003. Examination of genitalia is needed for safe determination. The male genitalia are readily separated from those of closely related species by the combination of following characteristics: long and slender valvae; a short and robust gnathos; a distally bifurcate tergum VIII with one club-like lateral extension. The female genitalia are similar to those of *S. gorbunovi*, *S. hamatella* Nupponen & Nupponen, 2001 and *S. malozemovi* Nupponen, 2003, but differ by a broader and more robust sclerotized tip of the sterigma and a deeper, V-shaped medial incision of sternum VIII.

Description: Wingspan 8-9.5 mm. Head, antenna, collar, tegula and thorax dark brown. Neck tuft dirty white mixed with pale brown. Haustellum brown, laterally with few dirty white scales. Labial palp dark brown, more (segment I) or less (segments II-III) covered by dirty white scales. Legs brown, femur densely and tarsus and tibia sparsely scattered with dirty white; dorsal surface darker. Abdomen fuscous, ventral side and segments VII-VIII densely mixed with dirty white. Forewing dark brown; whole wing with scattered black scales occurring more densely in fold; two indistinct whitish spots in fold at 0.2 and 0.5; few white scales at apical 0.2 of wing, more frequently near margins. Hindwing pale fuscous.

Male genitalia (Figs. 22-23): Uncus reduced. Gnathos asymmetrical, club-like; tip strongly sclerotized with small lateral extensions. Aedeagus thick and short, bottle-shaped. Valvae basally fused, long and slender, apex rounded and setose; inner margin straight, outer slightly convex at distal 2/3. Sternum VIII subrectangular, almost four times as wide as high; posterior margin concave. Tergum VIII subtriangular; distally bifurcate, furcation arms slightly asymmetrical; anterior margin medially incised; lateral margin medially with roundish extension; one lateral process reduced, another one robust, sclerotized, club-like with small, irregular lateral extensions.

Female genitalia (Fig. 24): Sterigma triangular, anterior margin shallowly concave; tip strongly sclerotized, triangular, rather broad. Sternum VII subrectangular; posterior margin with deep, V-shaped medial incision. Apophyses anteriores 0.35 x length of apophyses posteriores.

Bionomy: The specimens were collected by sweeping on various kinds of dry, xerothermic, gravely or sandy steppe slopes.

Distribution: Russia (S. Buryatia).

Etymology: The species is dedicated to my mother Eeva Nupponen, who has supported my work on insects through the years.

Remarks: *S. eevae* Nupponen, sp. n. belongs to the *terekholensis* species-group (see K. & T. NUPPONEN, 2001; NUPPONEN, 2003, 2005b). According to the genitalia structure of both sexes, its closest relatives are *S. gorbunovi* and *S. malozemovi*.

Scythris felixi Bengtsson & Sutter, 1996

Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 27-V-2006, 1 ♂, 04-VI-2006, 10 ♂ ♂, K. Nupponen leg. One genitalia preparation preserved in glycerol.

Distribution. Mongolia, Russia (Altai, S Buryatia).

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Scythris fissurella Bengtsson, 1996

Russia, Astrahan oblast, 48º 08' N 46º 52' E, 10 m a.s.l., Baskunzak salt lake SW, Bogdo, 27-VI-II-2006, 1 ♀, K. Nupponen leg. Genitalia slide: K. Nupponen prep. no. 1/14-X-2006. (Figs. 18-20).

Distribution: Iran, Oman, Pakistan, Russia (Lower Volga region), Sudan, Yemen.

Remarks: *S. fissurella* is possibly a species complex (Bengtsson pers. comm.). However, further material from different localities is needed until the problem can be solved. For the moment the Russian specimen is considered as *S. fissurella*. The present record extends the known distribution range about 2000 km to the north. New to Europe and Russia.

Scythris gorbunovi Nupponen, 2003

Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 27-V-2006, 21 ♂♂, 8 ♀♀, 4-VI-2006, 2 ♂♂, K. Nupponen leg.; Russia, S-Buryatia, 50º 58-59' N 106º 38-40' E, 550-600 m a.s.l., Chikoy valley, Novoselenginsk village 10 km S, sand dunes/sandy steppe, 29-V-2006, 1 ♂, 2-VI-2006, 19 ♂♂, 3 ♀♀, 3-VI-2006, 35 ♂♂, 11 ♀♀, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 4 / 8-X-2006, ♂, 2 / 7-X-2006, ♀.

Distribution: Russia (Buryatia).

Scythris heikkii Nupponen, sp. n.

Type material. Holotype: ♂ (Fig. 25): Russia, S-Buryatia, 51º 37' N 106º 46' E, 600 m a.s.l., Hamar Daban Mountains, bolshoi Sanzheevka river, Kharamsha village 2 km W, forest steppe, 7-VI-2006, K. Nupponen leg. In coll. T. & K. Nupponen.

Paratypes 77 ♂♂, 31 ♀♀: Ibidem, 06-VI-2006, 7 ♂♂, 2 ♀♀, 07-VI-2006, 67 ♂♂, 23 ♀♀, K. Nupponen leg.; Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 04-VI-2006, 3 ♂♂, 6 ♀♀, K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 5/08-X-2006, ♂, 3/07-X-2006, ♀. Three further genitalia preparations preserved in glycerol. In coll. T. & K. Nupponen.

Diagnosis: Externally *S. heikkii* Nupponen, sp. n. may be mixed with many small, dark scythridids. Examination of genitalia is needed for safe determination. The genitalia exhibit characteristics typical for the *terekholensis* species-group (see Remarks). The male genitalia are readily separated from those of the other species in the group by the short, roundish valvae with a tooth-like extension near inner margin, as well as by shape of tergum VIII. In the female genitalia, sternum VII is similar to that of *S. arenicola* Nupponen, 2005, but shape of the sterigma differs from that of all other known species of the group.

Description: Wingspan 7.5-9 mm. Head, antenna, collar, tegula, neck tuft and thorax dark brown; tegula and thorax mixed with a few paler scales. Haustellum dark brown scattered with dirty white. Labial palp dark brown, more (segment I) or less (segments II-III) mixed with pale fuscous. Legs fuscous, femur mixed with pale scales; hindlegs paler than fore- and midlegs. Abdomen dorsally dark fuscous, ventrally pale fuscous; in female tergal segments VII-VIII pale fuscous. Forewing dark brown; narrow dirty white streak in fold from base to 0.4; scattered pale fuscous and dirty white scales at apical half of wing, more frequently at midwing and in apical area; fringe fuscous, paler than forewing. Hindwing fuscous.

Male genitalia (Figs. 26-27): Uncus reduced. Gnathos asymmetrical, large; at upperside comb-like sclerotization and terminally plug-shaped sclerotized extension. Aedeagus short and thick, slightly bent, distal 0.3 tapered. Valvae basally fused, short, terminal 0.75 roundish; medially near inner margin a tooth-like sclerotized extension. Sternum VIII quadrangular, four times as wide as high. Tergum VIII subhexagonal; anterior margin concave; posterior corners with semicircular flap; posterior margin deeply concave, medially with two parallel, short and slightly asymmetrical extensions.

Female genitalia (Fig. 28): Sterigma consists of asymmetrical sclerotization shaped like molar tooth, and two separate parallel, triangular plates above posterior corners of sclerotization. Sternum VII

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subrectangular; posterior margin straight and medially with large labiate sclerotization. Apophyses anteriores 0.6 x length of apophyses posteriores.

Bionomy: The specimens were swept on rocky steppes.

Distribution: Russia (S Buryatia).

Etymology: The species is dedicated to my father Heikki Nupponen, who has supported my work on insects through the years.

Remarks: *S. heikkii* Nupponen, sp. n. tentatively belongs to the *terekholensis* species-group (see NUPPONEN, 2003, 2005b), although shape of the sterigma in the female genitalia does not support this. *S. arenicola* seems to be the closest known relative of *S. heikkii*, based on the extension at inner margin of the valva in the male genitalia, and shape of sternum VII in the female genitalia.

Scythris jakutica Sinev, 2001

Russia, S-Buryatia, 51º 11-13' N 106º 10-12' E, 700 m a.s.l., Hamar Daban Mountains, Murtoy river, Gusinoe ozero village 6 km NW, forest steppe, 4-VI-2006, 3 ♂ ♂, 1 ♀, K. Nupponen leg. (Fig. 29). Genitalia slide: K. Nupponen prep. no. 3 / 8-X-2006, ♀. One further genitalia preparation preserved in glycerol.

Distribution: Russia (Jakutia, S-Buryatia).

Remarks: The specimens were collected by sweeping on a rocky steppe slope. The species is previously known by the holotype (male) only (see SINEV, 2001a). Female is externally similar to a male, but smaller in size (wingspan 10 mm in female, 10.5-11.5 mm in male) and abdominal segments VII-VIII are ventrally paler.

Female genitalia (Fig. 30): Sternum VII subquadrangular, medioposteriorly with deep, U-shaped incision; digitate lateral process medially at right margin of incision; posteriorly furnished with a heart-shaped, membranous, marginally setose process. Sterigma oval, posteriorly indented, situated at 'bottom' of posterior incision of sternum VII.

Scythris limbella (Fabricius, 1775)

Russia, Astrahan oblast, 48º 08' N 46º 52' E, 10 m a.s.l., Baskunzak salt lake SW, Bogdo, 26-VI-II-2006, 3 ♂ ♂, K. Nupponen leg.

Distribution. W. Palaearctic, E. Nearctic.

Scythris nigridorsella Nupponen, sp. n.

Type material. Holotype: ♂ (Fig. 31): Russia, Astrahan oblast, 48º 08' N 46º 52' E, 10 m a.s.l., Baskunzak salt lake SW, Bogdo, 26-VIII-2006, K. Nupponen leg. In coll. T. & K. Nupponen.

Paratypes 4 ♂ ♂, 1 ♀: Idem, 4 ♂ ♂; Russia, Southern Urals, 50º 40' N 54º 26' E, 230 m a.s.l., Orenburg oblast, Pokrovka village 20 km S, Schibendy valley, 7-VI-1998, 1 ♀, T. & K. Nupponen leg. Genitalia slides: K. Nupponen prep. no. 1/17-IX-2006, ♂, 5 / 3-I-1998, ♀. In coll. T. & K. Nupponen.

Diagnosis: Externally *S. nigridorsella* Nupponen, sp. n. resembles many dark scythridids of equal size. Two indistinct pale blotches and a narrow black streak at basal 0.1 of dorsal margin on the forewings separate the taxon from superficially similar species, for example *S. pudorinella* (Möschler, 1866). In the male genitalia, broad and asymmetrical valvae and shape of the medioposterior "handle" of sternum VIII are diagnostic. In the female genitalia, shape of the sterigma differs from that of related species.

Description: Wingspan 13-14 mm (male); 11.5 mm (female). Head, antenna, collar, tegula, thorax and haustellum bronzy greenish, more or less mixed with dirty beige and creamy brown. Neck tuft pale beige. Labial palp: segment I pale beige; segments II and III dark brown, upper surface mixed with creamy brown scales. Legs fuscous mixed with creamy brown; hindleg tibia pale brown. Male abdomen fuscous, anal tuft paler. Female abdomen dorsally blackish, basally lead-grey spot and narrow band, two terminal segments yellowish cream-coloured; ventrally pale greyish yellow, basally and laterally with lead-grey scales. Forewing bronzy greenish, slightly glossy; large, indistinct cream-coloured

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blotches in fold at 1/3 and above tornus; a few blackish brown scales in fold; black scales at basal 0.1 of dorsal margin forming narrow streak; indistinct dark brown spot subapically. Forewing pattern are more distinct in female. Hindwing fuscous, darker in female; fringe basally paler.

Male genitalia (Figs. 32-33): Uncus large, bifurcate; arms basally wide, tapering to middle, distal half of equal width, slightly bent, tip rounded. Distal arm of gnathos slender, curved and pointed. Aedeagus 0.9 x length of right valva, strongly curved; basal 2/3 tapered, distal 1/3 slender. Valvae asymmetrical and very broad. Left valva widely blade-shaped; inner margin almost straight, outer irregularly convex; distinct flap medially at 1/3, extending to middle of inner margin; at middle of valva large, longish bulge. Right valva spoon-shaped; distinct flap medially at 0.4; triangular and pointed extension subapically at inner margin; outer margin medially shallowly extended. Sternum VIII subrectangular, posterior margin widely incised; medioposterior "handle" robust with large, asymmetrical terminal flap. Tergum VIII basically pentagonal, posteriorly rounded, anterior margin with wide V-shaped incision.

Female genitalia (Fig 34): Sterigma slightly asymmetrical, anteriorly deeply incised subrectangular plate with dome-shaped sclerotization medially; horizontal cross section at middle; posterior portion subrectangular, irregularly sclerotized. Ductus bursae weakly sclerotized, posterior part broader. Sternum VII subrectangular with shallow posteromedian incurvation; shallow labiate sclerotization at 'bottom' of incurvation. Apophyses anteriores 0.6 x length of apophyses posteriores.

Bionomy: The males came to artificial light at a very warm night. The habitat is a desert steppe close to a saline shore of the Lake Baskunzak. For further notes on the vegetation and climate of the locality, see KOMAROV & ZOLOTUHIN (2005). The female was collected by sweeping at daytime in a chalk steppe.

Distribution: Russia: the Volgo-Ural region (Astrahan and Orenburg oblasts).

Etymology: Lat. *niger* = black; *dorsum* = dorsal area of a wing. The name of the species alludes to a narrow black basal streak at dorsal margin of the forewing.

Remarks: *S. nigridorsella* Nupponen, sp. n. belongs to the *pascuella* species-group. The single female reported as *Scythris* sp. in NUPPONEN *et al.* (2000) refers to the taxon newly described here. The species appears to be bivoltine.

Scythris pudorinella (Möschler, 1866)

Russia, Astrahan oblast, 48º 08' N 46º 52' E, 10 m a.s.l., Baskunzak salt lake SW, Bogdo, 27-VII-2006, 1 ♂, K. Nupponen leg. Genitalia preparation preserved in glycerol.

Distribution: Greece, Romania, Russia (S Ural, Lower Volga region, Altai Mountains), Turkey.

Remarks: A late date of capture indicates that the taxon has a partial second generation. The main flight period is in the first half of June.

Discussion

The spring fauna of eastern Palaearctic Scythrididae is generally very poorly known. Four of the eight species recorded in late May – early June in southern Buryatia are previously unknown. In 2006, spring in the Baikal region was very late: in 8th June there were still patches of snow in the valleys and drifting ice in the Lake Baikal. Flight period of the first summer scythridids, *S. cassiterella* and *S. felixi* just started on the most xerothermic slopes, while leaves of *Populus* spp. were still very small.

Records of *S. bagdadiella* and *S. fissurella* from the Volgo-Ural region are surprising and indicate that further taxon known to date only from the south (Iran, Turkmenistan, C Asia) might well be discovered more far in the north. Collecting by light appears to be an effective method to observe such scythridids flying in late summer, while it is difficult and unpleasant to collect by sweeping in steppe habitats, due to dry vegetation with numerous seeds fixed in the net during collecting.

After the present additions, 30 species of the family Scythrididae are known from southern Buryatia and 39 species from the southern Urals. The scythridid fauna of the Lower Volga region is poorly known and probably many additional species will be found in the future.

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K. N.
Miniatontie, 1 B 9
FIN-02360 Espoo
FINLANDIA / *FINLAND*
E-mail: Kari.Nupponen@kolumbus.fi

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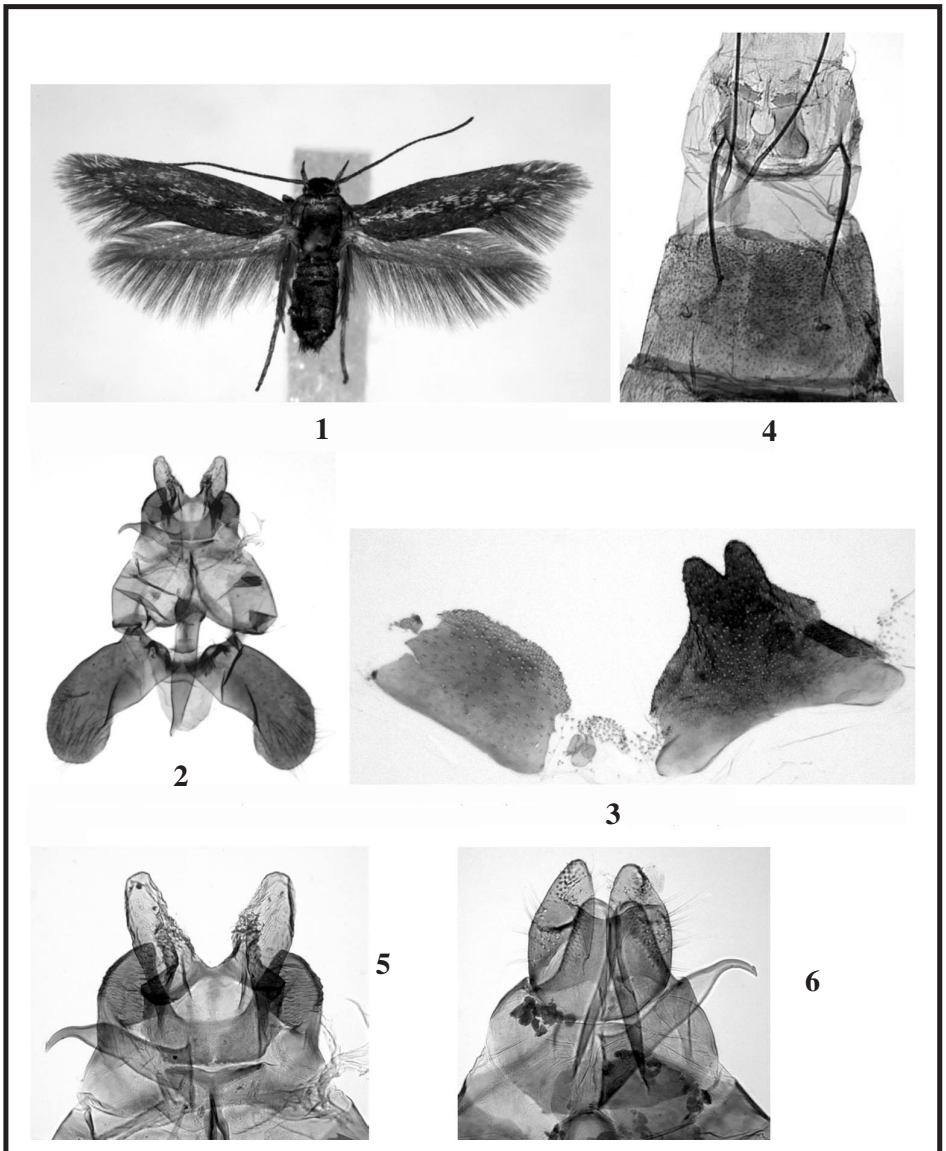

Figs 1-6.– 1. Imago (male, holotype) of *Scythris albosuffusella* Nupponen, sp. n. **2.** Male genitalia of *Scythris albosuffusella* Nupponen, sp. n. (paratype; GP 1/24-X-2006 KN). **3.** Tergum VIII (left) and sternum VIII (right) of *Scythris albosuffusella* Nupponen, sp. n. (paratype; GP 1/24-X-2006 KN). **4.** Female genitalia of *Scythris albosuffusella* Nupponen, sp. n. (paratype; GP 1/07-X-2006 KN). **5.** The uncus-gnathos complex of *Scythris albosuffusella* Nupponen, sp. n. (paratype; GP 1/24-X-2006 KN). **6.** The uncus-gnathos complex of *Scythris nitidella*, Bengtsson & Liška, 1996 (Tuva; GP BÅB 681X).

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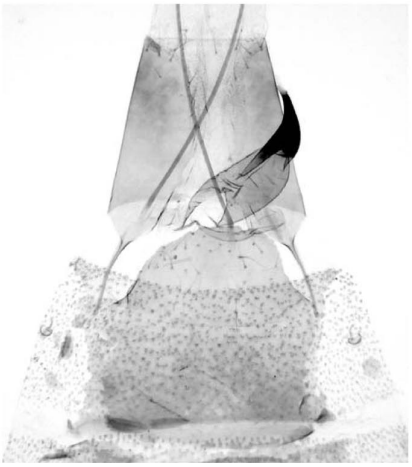

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Figs 7-9.– 7. Imago (male, holotype) of *Scythris apotomella* Nupponen, sp. n. **8.** Male genitalia of *Scythris apotomella* Nupponen, sp. n. (paratype; GP 6/08-X-2006 KN). **9.** Female genitalia of *Scythris apotomella* Nupponen, sp. n. (paratype; GP 1/08-X-2006 KN).

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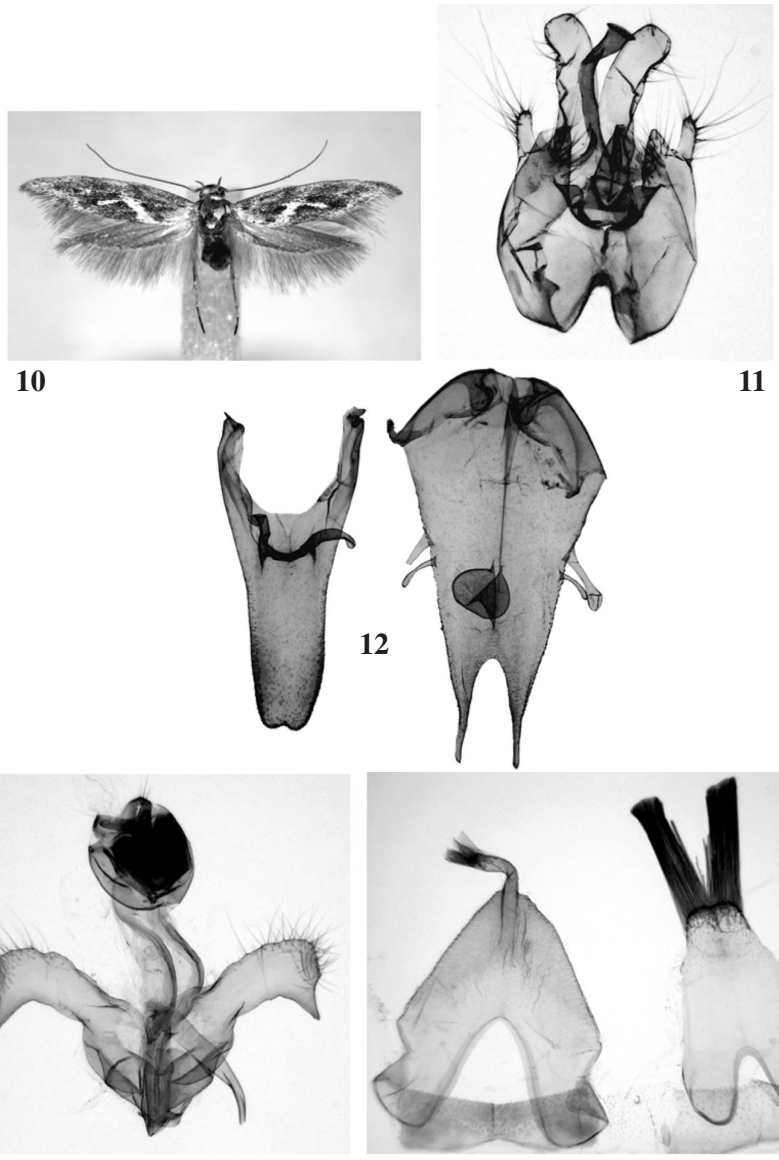

Figs 10-14.– 10. Imago (male) of *Scythris bagdadiella* Amsel, 1949 (S-Ural). **11.** Male genitalia of *Scythris bagdadiella* Amsel, 1949 (S-Ural; GP 1/24-IX-2006 KN). **12.** Tergum VIII (left) and sternum VIII (right) of *Scythris bagdadiella* Amsel, 1949 (S-Ural; GP 1/24-IX-2006 KN). **13.** Male genitalia of *Scythris barguzinensis* Bengtsson & Liška, 1996 (S-Buryatia; GP 1/29-X-2006 KN). **14.** Tergum VIII (right) and sternum VIII (left) of *Scythris barguzinensis* Bengtsson & Liška, 1996 (S-Buryatia; GP 1/29-X-2006 KN).

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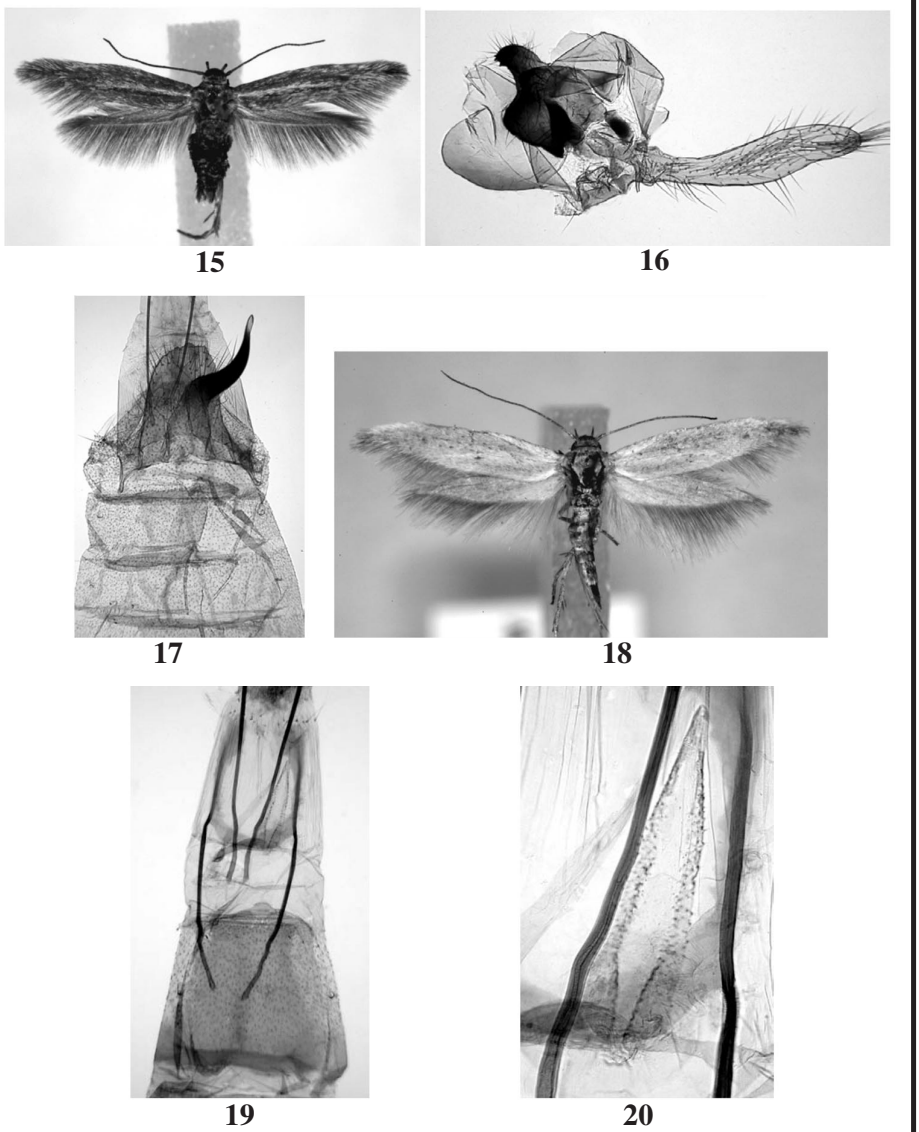

Figs 15-20.– 15. Imago (male, holotype) of *Scythris buraetica* Nupponen, sp. n. **16.** Male genitalia of *Scythris buraetica* Nupponen, sp. n. (paratype; GP 1/04-X-2002 KN). **17.** Female genitalia of *Scythris buraetica* Nupponen, sp. n. (paratype; GP 7/04-X-2002 KN). **18.** Imago (female) of *Scythris fissurella* Bengtsson, 1996 (Lower Volga region). **19.** Female genitalia of *Scythris fissurella* Bengtsson, 1996 (Lower Volga region; GP 1/14-X-2006 KN). **20.** Sterigma of *Scythris fissurella* Bengtsson, 1996 (Lower Volga region; GP 1/14-X-2006 KN).

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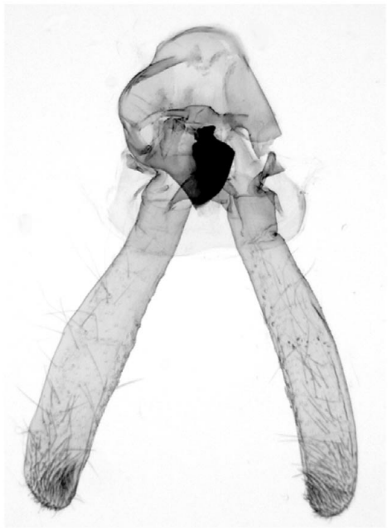

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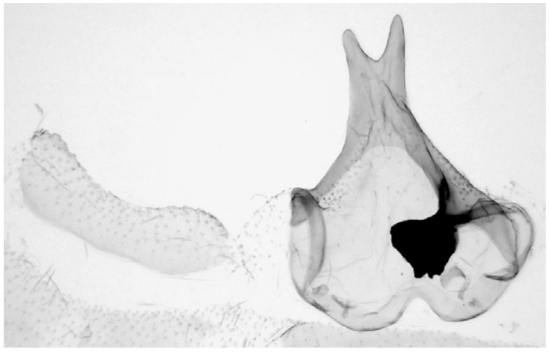

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Figs 21-24.– 21. Imago (male, holotype) of *Scythris eevae* Nupponen, sp. n. **22.** Male genitalia of *Scythris eevae* Nupponen, sp. n. (paratype; GP 7/08-X-2006 KN). **23.** Tergum VIII (right) and sternum VIII (left) of *Scythris eevae* Nupponen, sp. n. (paratype; GP 7/08-X-2006 KN). **24.** Female genitalia of *Scythris eevae* Nupponen, sp. n. (paratype; GP 1/07-X-2006 KN).

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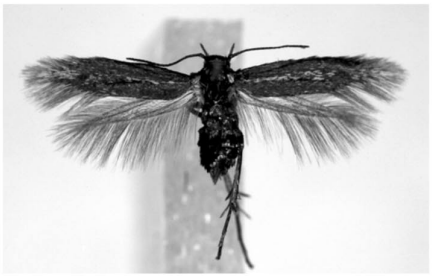

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Figs 25-28.– 25. Imago (male, holotype) of *Scythris heikkii* Nupponen, sp. n. **26.** Male genitalia of *Scythris heikkii* Nupponen, sp. n. (paratype; GP 5/08-X-2006 KN). **27.** Tergum VIII (left) and sternum VIII (right) of *Scythris heikkii* Nupponen, sp. n. (paratype; GP 5/08-X-2006 KN). **28.** Female genitalia of *Scythris heikkii* Nupponen, sp. n. (paratype; GP 3/07-X-2006 KN).

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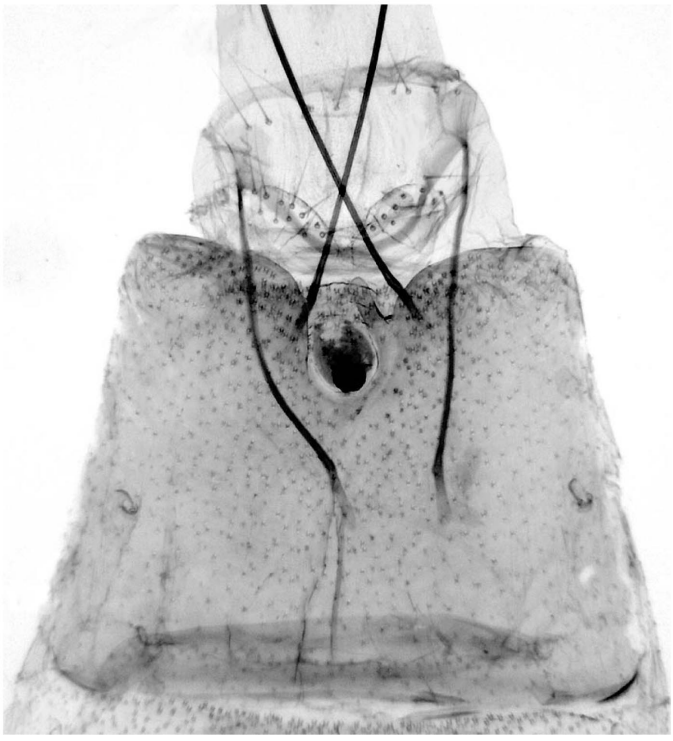

Figs 29-30.– 29. Imago (male) of *Scythris jakutica* Sinev, 2001 (S-Buryatia). **30.** Female genitalia of *Scythris jakutica* Sinev, 2001 (S-Buryatia; GP 3/08-X-2006 KN).

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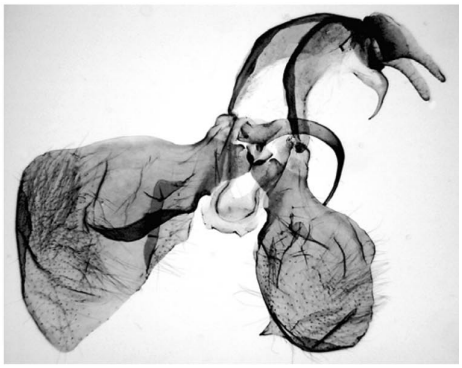

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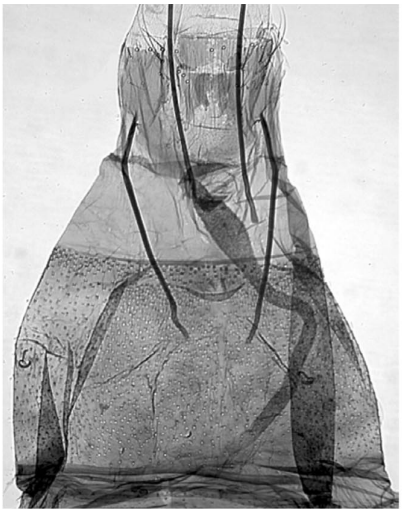

34

Figs 31-34.– 31. Imago (male, holotype) of *Scythris nigridorsella* Nupponen, sp. n. **32.** Male genitalia of *Scythris nigridorsella* Nupponen, sp. n. (paratype; GP 1/17-IX-2006 KN). **33.** Tergum VIII (left) and sternum VIII (right) of *Scythris nigridorsella* Nupponen, sp. n. (paratype; GP 1/17-IX-2006 KN). **34.** Female genitalia of *Scythris nigridorsella* Nupponen, sp. n. (paratype; GP 5/03-I-1998 KN).

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COMITÉ PARA LA PROTECCIÓN DE LA NATURALEZA, PROYECTO DE INVESTIGACIÓN CIENTÍFICA DE SHILAP / *COMMITTEE FOR THE PROTECTION OF NATURE, PROJECT OF SCIENTIFIC INVESTIGATION OF SHILAP*

Solicitud de autorización para recoger lepidópteros con fines científicos en España

Las solicitudes cumplirán las siguientes condiciones:

1.– Estar al día en el pago de la cuota anual de la Sociedad, antes de solicitar los permisos.

2.– Enviar una carta al Secretario General de SHILAP con todos los datos personales, incluyendo nombre, apellidos, dirección, DNI o número de pasaporte, número de teléfono y número de fax con código del país y prefijo, y/o correo electrónico. Estos datos serán enviados al Secretario General con un mínimo de 45 días de antelación al período de captura previsto.

3.– Se detallará el área donde se desea capturar el material (provincia y / o Comunidad Autónoma), el período de tiempo (días, meses o todo el año); procedimiento de captura que se desea emplear (manga entomológica, grupo electrógeno, etc), material que se desea recoger (especies, géneros, familias, y/o superfamilias), y cualquier otro dato que se desee añadir.

4.– Todos los socios de SHILAP que soliciten estos permisos para recoger lepidópteros en España con fines científicos, se incluirán en el Proyecto de Investigación Científica creado por la Sociedad y denominado: *"Faúnula Lepidopterológica Ibérica, Baleárica y Macaronésica"*

5.– Con el fin de contribuir con este Proyecto Científico, se ruega remitan a SHILAP, **o una copia por correo electrónico (e-mail) o una copia en papel y otra en disquete, con el listado del material recogido en EXCEL,** sólo en este formato, indicando la Familia, Subfamilia, Tribu, nombre de la especie (género, especie, autor y año), localidad, UTM o GPS, provincia, fecha de captura, colector y número de machos y hembras capturados (**sólo 5 ejemplares por taxón y localidad, máximo**). Por favor utilice sólo el "*Catálogo sistemático y sinonímico de los lepidópteros de la Península Ibérica y Baleares (Insecta: Lepidoptera) (Segunda parte)* (A. VIVES MORENO, 1994)". Esta lista es necesaria para este Proyecto Científico de SHILAP y para nuevas autorizaciones.

6.– Es obligatorio publicar en *SHILAP Revta. lepid.,* las nuevas especies que se descubran y remitir a SHILAP **una parte del material TIPO**, para su posterior incorporación a la colección de Lepidoptera del Museo Nacional de Ciencias Naturales en Madrid, España.

7.– Se recuerda a todos los socios la obligación de estar autorizados para recoger Lepidoptera, con fines científicos, en España.

8.– Conocer los fines científicos de SHILAP y comprometerse a pagar los gastos de participación en este Proyecto Científico, que la Junta Directiva considere en cada momento y que se comunicará con antelación.

Application for permit to collect Lepidoptera in Spain for scientific purposes

Applications must abide by the following conditions:

1.– Society's annual fee must be paid before applying for the permits.

2.– A letter applying for the permit has to be addressed to General Secretary of SHILAP, including name, surname, address, ID card number or Passport number, telephone number and fax number with country code and prefix, and/or e-mail address. These data must reach the General Secretary at least 45 days in advance of the foreseen collecting activity.

3.– The collecting area to be visited by the applicant should also be detailed (province and / or Autonomous Community), expected dates (days, months, even the whole year), collecting method (entomological net, generator, etc), taxonomical groups of interest to be collected (species, genera, families and/or superfamilies); any other data the applicant wishes to add.

4.– All members of SHILAP who apply for these permits to collect Lepidoptera in Spain with scientific purpose, will be included in a Project of Scientific Investigation created by the Society and called: *"Lepidopterological Fauna of the Iberian Peninsula, Balearic Islands and Macaronesian region"*.

5.– In order to contribute with this Scientific Project, it is requested to remit to SHILAP, **or a copy by electronic mail (e-mail) or a copy in paper and another one in diskette, with the listing of the picked up material in EXCEL,** only in this format, indicating the Family, Subfamily, Tribe, name of the species (genera, species, author name and year), town, UTM or GPS, province, dates of capture, collector and numbers of males and females captured (**only 5 exemplars for taxon and twon, maximum**). Please use only the "*Catálogo sistemático y sinonímico de los lepidópteros de la Península Ibérica y Baleares (Insecta: Lepidoptera) (Segunda parte)* (A. VIVES MORENO, 1994)". This list is necessary for this Scientific Project of SHILAP and for new authorizations.

6.– It's obligatory to publish in *SHILAP Revta. lepid*., the new species that are discovered and to remit to SHILAP **a part of the TYPE material**, for their later incorporation to the collection of Lepidoptera of the National Museum of Natural History in Madrid, Spain.

7.– All members are kindly reminded of the obligation to be duly authorized for collecting Lepidoptera, with scientific purpose, in Spain.

8.– To know the scientific aims of SHILAP and to commit to pay the expenses of participation in this Scientific Project, that the Officers of the Council considers in each moment and that will communicate with advance.